COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare th	at:
--	-----

This declaration is	s of the following type:
[X] [] []	original divisional continuation continuation-in-part
	INVENTORSHIP IDENTIFICATION
My residence, p original, first and names are listed entitled:	ost office address and citizenship are as stated below next to my name. I believe I am the discount solution solution is solved inventor (if only one name is listed below) or an original, first and joint inventor (if plural below) of the subject matter which is claimed and for which a patent is sought on the invention
	TITLE OF INVENTION
	"SELECTIVE ETCHING OF CARBON-DOPED LOW-K DIELECTRICS"
	SPECIFICATION IDENTIFICATION
The specification	
[X] []	is attached hereto was filed on, under Serial No. (unknown), executed on even date herewith; or
[]	Express Mail No
[]	was described and claimed in PCT international application no on and as amended under PCT Article 19 on
	OF PAREDS AND DUTY OF CANDOR
A	CKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR
I hereby state	that I have reviewed and understand the contents of the above-identified specification, including amended by any amendment referred to above.
I acknowledg	e the duty to disclose all information I know to be material to patentability in accordance with 2 and 1 and 1 and 1 accordance with 2 and 1 and 1 accordance with 2 and
and which is	material to the examination of this application; namely, information where there is a bacomandate at a reasonable Examiner would consider it important in deciding whether to allow the application
to issue as a j	In compliance with this duty, there is attached an Information Disclosure Statement in with 37 CFR §1.98.

PRIORITY CLAIM (35 U.S.C. §119)

• :

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any provisional or any
foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating
at least one country other than the United States of America listed below, and have also identified below any
foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at
least one country other than the United States of America filed by me on the same subject matter having a filing
date before that of the application(s) of which priority is claimed.
at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating a least one country other than the United States of America filed by me on the same subject matter having a filing

	[X]	No suc	h applications have	been file	i.					
	[]	Such ag	oplications have be	en filed as	follows:					
А.			CT application(s) y claims under 35			(6 mos	. for design	n) pri	or to this ap	plication,
Count	ry/PCT		Application N	<u>40</u>	Date	Filed		. <u>I</u>	Priority Clair	<u>ned</u>
								[Yes [] Yes [] Yes []	No
В.	All for applica		olication(s), if any	, filed mo	re than 12	mos. ((6 mos. for	desi	gn) prior to	this U.S.
	Country Applica Filing d	ition No:								
C.	US Pro	visional	applications filed	within 12	months pri	or to t	his U.S. Ap	plica	ition	
	Applica Filing d	ition No: late:								
			PRIOR	ITY CLA	IM (35 U.S.	.C. §12	20)			
hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.										
	[]		n applications have oplications have bee							
	Serial N	lo.	Filing Date]	Patented		tatus ending		Abandoned	

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa Registration No. 25,610 Donald Verplancken Registration No. 33,217 Lawrence Edelman Registration No. 25,226 Registration No. 29,301 Michael B. Einschlag Registration No. 37,165 Raymond Kam-On Kwong James C. Wilson Registration No. 35,412 Joseph Bach Registration No. 37,771 Registration No. 25,436 Robert W. Mulcahy Walter Benjamin Glenn Registration No. 44,713 Francis E. Morris Registration No. 24,615

Send correspondence to:

Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc. P. O. Box 450A Santa Clara, CA 95052. Francis E. Morris Phone No. (650) 493-4935

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or first	inventor: Yunsang Kim		
Inventor's signature:	yem?	Date:	-09-03
Residence:	San Jose, California		
Post Office Address:	3648 Gleason Avenue		
	San Jose, CA 95130		
	U.S.A.	Country of Citizenship:	Korea South
Full name of second inventor's signature:	ntor: Señngho/Shin	Date:	6/9/-3
Residence:	San Jose, California		77
Post Office Address:	4325 Norwalk Dr. R-105		l
	San Jose, CA 95129		
	U.S.A.	Country of Citizenship:	Korea South

Full name of third inven	itor:	Heeyeop Chae	
Inventor's signature:	Aceryico San Jose, Califo		Date: 6-9-2003
Residence: Post Office Address:	1657 Tawnygate San Jose, CA 95	: Way	
1	U.S.A.		Country of Citizenship: Korea South
Full name of fourth inve	entor:	Joey Chiu	
Inventor's signature:			Date:
Residence:		Tauyuan County,	Taiwan
Post Office Address:	No. 226, Ming-7 Chung-Li City,	Fer Road Fauyuan County,	Taiwan
	TAIWAN		Country of Citizenship: Taiwan
Full name of fifth inven	tor:	Yan Ye	
Inventor's signature:	M	\sim	Date: 6-09-2003
Residence:	Saratoga, Califo	rnia	
Post Office Address:	13271 Via Arrib Saratoga, CA 95		
	U.S.A.		Country of Citizenship: USA
Full name of sixth inver	itor:	Fang Tian	
Inventor's signature:			Date:
Residence: Post Office Address:	Fremont, Califo 750 Navajo Wa Fremont, CA 94	у	
	U.S.A.		Country of Citizenship: USA
Full name of seventh in	ventor:	Xiaoye Zhao	~ 6/8/D2
Inventor's signature:	170		Date:
Residence:	Mountain View		
Post Office Address:	117 Whits Road Mountain View		
	U.S.A.		Country of Citizenship: USA
Full name of eighth inv	entor:		
Inventor's signature:			Date:
Residence: Post Office Address:			
	U.S.A.		Country of Citizenship:

Full name of ninth inver	itor:			
Inventor's signature:		Date:		
	U.S.A.	Country of Citizenship:		

(Declaration ends with this page)

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

This declaration	is of the following type:
[X] [·] []	original divisional continuation continuation-in-part
	INVENTORSHIP IDENTIFICATION
	ost office address and citizenship are as stated below next to my name. I believe I am the sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural below) of the subject matter which is claimed and for which a patent is sought on the invention
	TITLE OF INVENTION
	"SELECTIVE ETCHING OF CARBON-DOPED LOW-K DIELECTRICS"
	SPECIFICATION IDENTIFICATION
The specification	of which:
() ()	is attached hereto was filed on
ACK	NOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR
I hereby state that the claims, as amer	I have reviewed and understand the contents of the above-identified specification, including added by any amendment referred to above.
I acknowledge the 37, Code of Federa	duty to disclose all information I know to be material to patentability in accordance with Title Regulations, §1.56,
and which is mater likelihood that a re- to issue as a patent,	rial to the examination of this application; namely, information where there is a substantial asonable Examiner would consider it important in deciding whether to allow the application and
[] In accordance with 37	compliance with this duty, there is attached an Information Disclosure Statement in CFR §1.98.

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, \$119, of any provisional or ar foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating foreign application(s) for patents.
foreign application(s) for network in the United States of America listed below and have also it with the designation
least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.
(V)

dat	e before tha	t of the application(s) of which priority	erica filed by me on the s	same subject matter having a filing
	[X]	No such applications have been file		
	Ü	Such applications have been filed as		
A.	Prior f and an	oreign/PCT application(s) filed with y priority claims under 35 U.S.C. §1	in 12 mos. (6 mos. for d 19	lesign) prior to this application,
Cou	untry/PCT	Application No	<u>Date Filed</u>	Priority Claimed
				[] Yes [] No [] Yes [] No [] Yes [] No
В.	All forei applicati	ign application(s), if any, filed more	e than 12 mos. (6 mos.	
	Country: Applicati Filing dat	on No:		
C.	US Provis	sional applications filed within 12 m	onths prior to this via	
	Application Filing date	n No:	owns prior to this U.S.	Application
		PRIORITY CLAIM	(35 U.S.C. §120)	
manner disclose substanti	provided by information	enefit under Title 35, United States Contion(s) designating the United States of the claims of this application is the first paragraph of Title 35, Unithat is material to the examination of that a reasonable Examiner would contain a patent) which occurred between the property of this application.	ode, §120, of any United of America that is/are lis not disclosed in that/tho ited States Code, §112, this application (namely	see prior application(s) in the I acknowledge the duty to
]	No Suc	such applications have been filed h applications have been filed, as follo	ws:	
<u>s</u>	erial No.	Filing Date Patente	Status ed Pending	Abandoned

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in

Peter J. Sgarbossa Registration No. 25,610 Donald Verplancken Registration No. 33,217 Lawrence Edelman Registration No. 25,226 Michael B. Einschlag Registration No. 29,301 Raymond Kam-On Kwong Registration No. 37,165 James C. Wilson Registration No. 35,412 Joseph Bach Registration No. 37,771 Robert W. Mulcahy Registration No. 25,436 Walter Benjamin Glenn Registration No. 44,713 Francis E. Morris Registration No. 24,615

Send correspondence to: Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc. P. O. Box 450A Santa Clara, CA 95052.

Francis E. Morris

Phone No. (650) 493-4935

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize

Full name of sole or i	first inventor: Yunsang Ki	m	
Inventor's signature:_ Residence: Post Office Address:	San Jose, California 3648 Gleason Avenue San Jose, CA 95130	Date:	
	U.S.A.	Country of Citizenship:	Korea South
Full name of second in	ventor: Neungho Shir	1	
Inventor's signature: Residence: Post Office Address:	San Jose, California 4325 Norwalk Dr. R-105 San Jose, CA 95129	Date:	
	U.S.A.	Country of Citizenship:	Korea South

Full name of third inv	entor:	Heeyeop Cha	e	
Inventor's signature:			Data	
Residence:	San Jose, Californ	ia .	Date:	
Post Office Address:	1657 Tawnygate V			
1 001 011100 1100 000.	San Jose, CA 951	•		
	541. 5050, 071 751.	- T		
	U.S.A.		Country of Citizenship:	Korea South
	0.0		country of Citizensing.	Rolea South
Full name of fourth inv	ventor:	Joey Chiu		
	Jon 11	ハノー	7	1010
Inventor's signature:	Joey	Mun	Date:	18/03
Residence:	Chung-Li City, Ta	uyuan County,	Taiwan	
Post Office Address:	No. 226, Ming-Ter	r Road	•	
	Chung-Li City, Ta	uyuan County,	Taiwan	
	TAIWAN		Country of Citizenship:	Taiwan
T II COCA I				
Full name of fifth inven	itor:	Yan Ye		
Inventor's signature:			Data	
Residence:	Saratoga, Californi	9	Date:	
Post Office Address:	13271 Via Arriba I			
1 001 0 11100 1 1001055.	Saratoga, CA 9507			
	om mogu, or 19507	Ū		
•	U.S.A.		Country of Citizenship:	USA
			,p.	00.1
Full name of sixth inver	ntor: F	ang Tian		
			•	
Inventor's signature:	n		Date:	
Residence:	Fremont, California	1		
Post Office Address:	750 Navajo Way	_		
	Fremont, CA 94539)		
,	U.S.A.		Country of Cities of its	TIOA
	U.S.A.		Country of Citizenship:	USA
Full name of seventh inv	ventor: X	iaoye Zhao		
		inojo zino		
Inventor's signature:			Date:	
Residence:	Mountain View, Ca	lifornia		
Post Office Address:	117 Whits Road			
	Mountain View, CA	94040		
	U.S.A.		Country of Citizenship:	USA
D 11 0 4 7 7 7				
Full name of eighth inve	ntor:			
Inventor's signature.			5	
Inventor's signature: Residence:			Date:	
Post Office Address:				
. our Office Addices.	,			

Country of Citizenship:

U.S.A.

Full name of ninth invento	r:		
Inventor's signature:Residence:		Date:	
Post Office Address:			
τ	J.S.A.	Country of Citizenship:	

(Declaration ends with this page)

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named invent	tor, I hereby declare that:		
This declaration is of the f	ollowing type:		
[X] original [] divisiona [] continua [] continua			
	INVENTORSHIP IDENTIFICATION		
original first and sole inve	address and citizenship are as stated below next to my name. I believe I am the entor (if only one name is listed below) or an original, first and joint inventor (if plural the subject matter which is claimed and for which a patent is sought on the invention		
	TITLE OF INVENTION		
"SELECTIVE ETCHING OF CARBON-DOPED LOW-K DIELECTRICS"			
	SPECIFICATION IDENTIFICATION		
The specification of which	ı:		
[] was filed date here [] Express and was [] was descoon	ed hereto d on, under Serial No. (unknown), executed on even ewith; or Mail No (as Serial No. not yet known) amended on (if applicable) cribed and claimed in PCT international application no filed and as amended under PCT Article 19 on EDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR		
I hereby state that I have	reviewed and understand the contents of the above-identified specification, including any amendment referred to above.		

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

[] In compliance with this duty, there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

PRIORITY CLAIM (35 U.S.C. §119)

foreign application(s) for patent least one country other than the I	he United States of America listed be	Code, §119, of any provisional or any international application(s) designating low, and have also identified below any aternational application(s) designating at the same subject matter having a filing
F=		

			. , ., .,	.a.med.	•
	[X]	No such applications	have been filed.		
	[]	Such applications have	ve been filed as foll	ows:	
A.	Prior fo	oreign/PCT applicatio priority claims unde	n(s) filed within 1 r 35 U.S.C. §119	2 mos. (6 mos. for	design) prior to this application,
Cou	ntry/PCT	Application	on No	Date Filed	Priority Claimed
					[] Yes [] No [] Yes [] No [] Yes [] No
В.	All forei applicati	gn application(s), if a on	ny, filed more tha	an 12 mos. (6 mos	s. for design) prior to this U.S.
	Country: Application Filing date	on No:			
C.	US Provis	ional applications file	d within 12 month	s prior to this II s	Annlinett
	Application Filing date	n No:			o. Application
		PRIO	RITY CLAIM (35	U.S.C. 8120)	·
manner production disclose is substantial application	provided by information al likelihood on to issue	tion(s) designating the ch of the claims of this that is material to the	United States Code, United States of A application is not f Title 35, United examination of this miner would consi	\$120, of any Unit merica that is/are idisclosed in that/ti States Code, \$11 application (name	ed States application(s) or PCT listed below and, insofar as the hose prior application(s) in the 2, I acknowledge the duty to ely, information where there is deciding whether to allow the e prior application(s) and the
] No] Suc	such applications have h applications have bee	been filed n filed, as follows:		
<u>s</u>	erial No.	Filing Date	Patented	Status Pending	Abandoned

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa Registration No. 25,610 Donald Verplancken Registration No. 33,217 Lawrence Edelman Registration No. 25,226 Michael B. Einschlag Registration No. 29,301 Raymond Kam-On Kwong Registration No. 37,165 James C. Wilson Registration No. 35,412 Joseph Bach Registration No. 37,771 Robert W. Mulcahy Registration No. 25,436 Walter Benjamin Glenn Registration No. 44,713 Francis E. Morris Registration No. 24,615

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Phone No. (650) 493-4935

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or fir	est inventor: Yunsang Kir	n	
Inventor's signature:		Date:	
Residence: Post Office Address:	San Jose, California 3648 Gleason Avenue San Jose, CA 95130		
	U.S.A.	Country of Citizenship:	Korea South
Full name of second inv	ventor: Neungho Shir	1	
Inventor's signature:		Date:	
Residence:	San Jose, California		
Post Office Address:	4325 Norwalk Dr. R-105		
	San Jose, CA 95129		
	U.S.A.	Country of Citizenship:	Korea South

Full name of third inve	entor: Heeyeop Ch	ae	
Inventor's signature:		Date:	
Residence:	San Jose, California	Date:	
Post Office Address:	1657 Tawnygate Way		
	San Jose, CA 95124		
	J. 19512		
	U.S.A.	Country of Citizenship: Korea	South
		Country of Chizenship. Roles	South
Full name of fourth inv	entor: Joey Chiu		
	555y G.I.I.		
Inventor's signature:		Date:	
Residence:	Chung-Li City, Tauyuan County	v. Taiwan	
Post Office Address:	No. 226, Ming-Ter Road	, ,	
	Chung-Li City, Tauyuan County	z. Taiwan	
		,	
	TAIWAN	Country of Citizenship: Taiwa	n
		Taiwa	
Full name of fifth invent	tor: Yan Ye		
Inventor's signature:		Date:	
Residence:	Saratoga, California		
Post Office Address:	13271 Via Arriba Drive		
	Saratoga, CA 95070		
	U.S.A.	Country of Citizenship: USA	
Fall carry of C 147			
Full name of sixth invent	tor: Fang Tian	1.	,
Inventor's signature:	-tuny	6/15	/2003
Residence:	Fremont, California	Date:	//
Post Office Address:	750 Navajo Way		
1 001 011100 1 1001 000.	Fremont, CA 94539		
	110mom, 011)4339		
	U.S.A.	Country of Citizenship: USA	
		country of emzensing. OSA	
Full name of seventh inve	entor: Xiaoye Zhao		
	•		
Inventor's signature:		Date:	
Residence:	Mountain View, California		
Post Office Address:	117 Whits Road		
	Mountain View, CA 94040		
	U.S.A.	Country of Citizenship: USA	
•		•	
7 . 11			
Full name of eighth inven	tor:		
T			
Inventor's signature:		Date:	
Residence:			
Post Office Address:			

Country of Citizenship:

U.S.A.

Full name of ninth inventor:		
Inventor's signature:Residence:	Date:	
Post Office Address:	•	
U.S.A.	Country of Citizenship:	

(Declaration ends with this page)

••		
FORM PTO-1595	RECORDATION FORM COVER	SHEET U.S. Department of Commerce Patent And Trademark Office
(Rev. 6-93)	PATENTS O	NI V
OMB No. 0651-0011 (exp. 4/94) To the Honorable Commissioner of Patents a	and Trademarks: Please record the atta	ached original document or copy thereof. 2. Name and address of receiving party(ies):
1. Name of conveying party(ies):	Date	2. Name and address of receiving party(ics).
	6/09/2003	Name: Applied Materials, Inc.
1. Yunsang Kim	6/09/2003	
2. Neungho Shin	6/09/2003	A Corporation of the State of Delaware
3. Heeyeop Chae	7/18/2009	
4. Joey Chiu	6/09/2003	Street Address: 3050 Bowers Ave
5. Yan Ye	6/15/2003	
6. Fang Tian	6/09/2003	Internal Address: M/S 2061
7. Xiaoye Zhao		05054
Additional name(s) of conveying party(ies)	<u> </u>	City: Santa Clara State: CA Zip: 95054
 Nature of conveyance: 	Merger	
X Assignment		Additional name(s) & address(es) attached? Yes X No
Security Agreement	Change of Name	Additional name(s) & additional name(s)
Other		
Execution Date: SEE ABO	/E	
Execution Date: SEE ABOV	· ~	
4. Application number(s) or registr	ration number(s):	August 1, 2003 (Date of Filir
Isstic document is being filed together	with a new application, the execution	date of the application is: August 1, 2003 (Date of Filir
A. Patent Application No.(s)		-
D. Potont No.(s)		
B. Patent No.(s)	8	
Additional numbers attached?_	Yes X No	
A description	whom correspondence concerning	6. Total number of applications and patents involved: 1
5. Name and address of party to w document should be mailed:	mon. som opposite the	· ·
	TO DIC	7. Total fee (37 C.F.R. 3.41)———— \$ 40.00
Name: APPLIED MAT	ERIALS, INC.	
		Enclosed
Internal Address: PATENT CO	JUNSEL, M/S 2001	X Authorized to be charged to deposit account 50-1074
7 0 D 450	Λ Λ	X Authorized to be charged to deposit account
Street Address: P.O. Box 450	J-A	8. Deposit account number:
City: Santa Clara State:	CA zip: 95052	50-1074
City: Santa Clara State:	OIL DIP. DOUB	
	DO NOT USE	
Statement and signature.	S. I. Surveying information is true at	nd correct and any attached copy is a true copy of the original document.
To the best of my knowledge and belie	f, the foregoing information is true ur	11 miles 8/1/03
ROBERT W. MULCAHY, R	eg. No. 25,436	Date
Name of Person Signing	s	Signature
1		1 /

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

Total number of pages including cover sheet, attachment and document: 10

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Yunsang Kim 3648 Gleason Avenue San Jose, CA 95130	2)	Neungho Shin 4325 Norwalk Dr. R-105 San Jose, CA 95129
3)	Heeyeop Chae 1657 Tawnygate Way San Jose, CA 95124	4)	Joey Chiu No. 226, Ming-Ter Road Chung-Li City, Tauyuan County, Taiwan
5)	Yan Ye 13271 Via Arriba Drive Saratoga, CA 95070	6)	Fang Tian 750 Navajo Way Fremont, CA 94539
7)	Xiaoye Zhao 117 Whits Road Mountain View, CA 94040	8)	
9)			

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"Selective Etching of Carbon-Doped Low-K Dielectrics"



for which application for Letters Patent in the United States was filed on @, under Serial No. @, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
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IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	66-09, 2003	Yunsang Kim,
2)	<i>∞</i> 6 − <i>o</i> 9 , 2003	Neungho Shin
3)	06-0P, 2003	Heeyeop Chae Hee Yeop Chae; legal name)
4)	, 2003	Joey Chiu

5) 6-7, 2003
Yan Ye

6) ______, 2003
Fang Tian

7) 6/9, 2003
Xiaoye Zhao

9) _____, 2003

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Yunsang Kim	2)	Neungho Shin
1	3648 Gleason Avenue		4325 Norwalk Dr. R-105
	San Jose, CA 95130		San Jose, CA 95129
3)	Heeyeop Chae	4)	Joey Chiu
	1657 Tawnygate Way		No. 226, Ming-Ter Road
	San Jose, CA 95124		Chung-Li City, Tauyuan County, Taiwan
5)	Yan Ye 13271 Via Arriba Drive Saratoga, CA 95070	6)	Fang Tian 750 Navajo Way Fremont, CA 94539
7)	Xiaoye Zhao 117 Whits Road Mountain View, CA 94040	8)	·
9)			

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"Selective Etching of Carbon-Doped Low-K Dielectrics"

for which application for Letters Patent in the United States was filed on @, under Serial No. @, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

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2)	, 2003	Neungho Shin
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4)	<u>7-18-</u> , 2003	Joey Chiu

5)	, 2003	
·		Yan Ye
6)	, 2003	Fana Tian
		Fang Tian
7)	, 2003	Xiaoye Zhao
		Aldoye Zhao
8)	, 2003	
9)	. 2003	

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Names and Addresses of Inventors:

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6)	, 2003	Yan Ye Fang Tian
7)	, 2003	Xiaoye Zhao
8)	, 2003	
9)	. 2003	





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UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 01, 2004

APPLIED MATERIALS, INC. ROBERT W. MULCAHY PATENT COUNSEL, M/S 2061 P.O. BOX 450-A SANTA CLARA, CA 95052

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/01/2003

REEL/FRAME: 014376/0529

NUMBER OF PAGES: 10

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KIM, YUNSANG

DOC DATE: 06/09/2003

ASSIGNOR:

SHIN, NEUNGHO

DOC DATE: 06/09/2003

ASSIGNOR:

CHAE, HEEYEOP

DOC DATE: 06/09/2003

14.44

ASSIGNOR: CHIU, JOEY

DOC DATE: 07/18/2003

/ L

ASSIGNOR: YE, YAN

DOC DATE: 06/09/2003

ASSIGNOR:

.::.

TIAN, FANG

DOC DATE: 06/15/2003

014376/0529 PAGE 2

ASSIGNOR:

ZHAO, XIAOYE

DOC DATE: 06/09/2003

ASSIGNEE:

APPLIED MATERIALS, INC. 3050 BOWERS AVE M/S 2061

SANTA CLARA, CALIFORNIA 95054

SERIAL NUMBER: 10632873

FILING DATE:

ISSUE DATE:

PATENT NUMBER:

JEFFREY OLSEN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

U.S. Department of Commerce Patent And Trademark Office FORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94) copy thereof. 102525524 To the Honorable Commissioner of Patents and Tra warne and address of receiving party(ies): Name of conveying party(ies): Date Applied Materials, Inc. 6/09/2003 Name: 1. Yunsang Kim 6/09/2003 2. Neungho Shin A Corporation of the State of Delaware 6/09/2003 3. Heeyeop Chae 7/18/2009 4. Joey Chiu Street Address: 3050 Bowers Ave 6/09/2003 5. Yan Ye 6/15/2003 6. Fang Tian Internal Address: M/S 2061 6/09/2003 7. Xiaoye Zhao Additional name(s) of conveying party(ies) attached? Yes X No City: Santa Clara State: CA zip: 95054 Nature of conveyance: __ Merger X Assignment Additional name(s) & address(es) attached? Yes X No _ Change of Name __ Security Agreement SEE ABOVE Execution Date: Application number(s) or registration number(s): (Date of Filing) If this document is being filed together with a new application, the execution date of the application is: August 1, 2003 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes X No Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: document should be mailed: - <u>\$ 40.00</u> 7. Total fee (37 C.F.R. 3.41)-APPLIED MATERIALS, INC. __ Enclosed Internal Address: PATENT COUNSEL, M/S 2061 \underline{x} Authorized to be charged to deposit account $\underline{50-1074}$ P.O. Box 450-A Street Address: 8. Deposit account number: 50-1074 State:_CA City: Santa Clara DO NOT USE THIS SP Statement and signature. To the best of my knowledge and belief, the foregoing information is ROBERT W. MULCAHY, Reg. No. 25 Date Name of Person Signing Total number of pages including cover sheet, attachment and document: 10

08/14/2003 ECOOPER 00000019 501074 10632873il documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Yunsang Kim	2)	Neungho Shin
	3648 Gleason Avenue		4325 Norwalk Dr. R-105
	San Jose, CA 95130		San Jose, CA 95129
3)	Heeyeop Chae	4)	Joey Chiu
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5)	Yan Ye 13271 Via Arriba Drive Saratoga, CA 95070	6)	Fang Tian 750 Navajo Way Fremont, CA 94539
7)	Xiaoye Zhao 117 Whits Road Mountain View, CA 94040	8)	
9)		•	

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"Selective Etching of Carbon-Doped Low-K Dielectrics"

for which application for Letters Patent in the United States was filed on @, under Serial No. @, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

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IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

5) 6-9, 2003

Yan Ye

6) ______, 2003

Fang Tian

Me 771

7) 6/9, 2003

yw o

8) ______, 2003

9) ______, 2003

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

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	3648 Gleason Avenue		4325 Norwalk Dr. R-105
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		rang han
7)	, 2003	Xiaoye Zhao
	2002	,
8)		
0)	2003	

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0)	2003	